

228844066.ST25.txt SEQUENCE LISTING

<110> Brown, Arthur M. Wible, Barbara A Yang, Qing

 $<\!120\!>$ Protein That Enhances Expression of Potassium Channels on Cell Surfaces and Nucleic Acids That Encode The Same

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375

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55

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228844066.ST25.txt Leu Pro Gln Pro Val His Pro Asp Val Thr Met Lys Pro Leu Pro Phe 65 70 75 80 Tyr Glu Val Tyr Gly Glu Leu Ile Arg Pro Thr Thr Leu Ala Ser Thr 85 90 95 Ser Ser Gln Arg Phe Glu Glu Ala His Phe Thr Phe Ala Leu Thr Pro $100 \hspace{1cm} 105 \hspace{1cm} 110$ Gln Gln Xaa Gln Gln Ile Leu Thr Ser Arg Glu Val Leu Pro Gly Ala 115 120 125 Lys Cys Asp Tyr Thr Ile Gln Val Gln Leu Arg Phe Cys Leu Cys Glu 130 135 140 Thr Ser Cys Pro Gln Glu Asp Tyr Phe Pro Pro Asn Leu Phe Val Lys 145 150 155 160 Val Asn Gly Lys Leu Cys Pro Leu Pro Gly Tyr Leu Pro Pro Thr Lys 165 170 175 Asn Gly Ala Glu Pro Lys Arg Pro Ser Arg Pro Ile Asn Ile Thr Pro 180 185 190 Leu Ala Arg Leu Ser Ala Thr Val Pro Asn Thr Ile Val Val Asn Trp 195 200 205 Ser Ser Glu Phe Gly Arg Asn Tyr Ser Leu Ser Val Tyr Leu Val Arg 210 215 220 Gln Leu Thr Ala Gly Thr Leu Leu Gln Lys Leu Arg Ala Lys Gly Ile 225 230 235 240 Arg Asn Pro Asp His Ser Arg Ala Leu Ile Lys Glu Lys Leu Thr Ala 245 250 255 Asp Pro Asp Ser Glu Val Ala Thr Thr Ser Leu Arg Val Ser Leu Met 260 265 270 Cys Pro Leu Gly Lys Met Arg Leu Thr Val Pro Cys Arg Ala Leu Thr 275 280 285 Cys Ala His Leu Gln Ser Phe Asp Ala Ala Leu Tyr Leu Gln Met Asn 290 295 300 Glu Lys Lys Pro Thr Trp Thr Cys Pro Val Cys Asp Lys Lys Ala Pro 305 310 315 320

Tyr Glu Ser Leu Ile Ile Asp Gly Leu Phe Met Glu Ile Leu Xaa Ser 325 330 335 Cys Ser Asp Cys Asp Glu Ile Gln Phe Met Glu Asp Gly Ser Trp Cys 340 345 350 Pro Met Lys Pro Lys Lys Glu Ala Ser Glu Val Cys Pro Pro Pro Gly 355 360 365 Tyr Gly Leu Asp Gly Leu Gln Tyr Ser Pro Val Gln Xaa Gly Xaa Pro 370 380 Ser Glu Asn Lys Lys Xaa Val Glu Val Ile Asp Leu Thr Ile Glu Ser 385 390 395 400 Ser Ser Asp Glu Glu Asp Leu Pro Pro Thr Lys Lys His Cys Xaa Val 405 410 415 Thr Ser Ala Ala Ile Pro Ala Leu Pro Gly Ser Lys Gly Xaa Leu Thr 420 425 430 Ser Gly His Gln Pro Ser Ser Val Leu Arg Ser Pro Ala Met Gly Thr 435 440 445 Leu Gly Xaa Asp Phe Leu Ser Ser Leu Pro Leu His Glu Tyr Pro Pro 450 455 460 Ala Phe Pro Leu Gly Ala Asp Ile Gln Gly Leu Asp Leu Phe Ser Phe 465 470 475 480 Leu Gln Thr Glu Ser Gln His Tyr Xaa Pro Ser Val Ile Thr Ser Leu Asp Glu Gln Asp Xaa Leu Gly His Phe Phe Gln Xaa Arg Gly Thr Pro 500 505 510 Xaa His Phe Leu Gly Pro Leu Ala Pro Thr Leu Gly Ser Ser His Xaa 515 520 525 Ser Ala Thr Pro Ala Pro Xaa Pro Gly Arg Val Ser Ser Ile Val Ala 530 540 Pro Gly Xaa Xaa Leu Arg Glu Gly His Gly Gly Pro Leu Pro Ser Gly 545 550 555 560 Pro Ser Leu Thr Gly Cys Arg Ser Asp Ile Xaa Ser Leu Asp 565 570 Page 15

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<211> 99

<212> PRT

<213> Rattus norvegicus

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Thr Trp Thr Cys Pro Val Cys Asp Lys Lys Ala Pro Tyr Glu Ser Leu 1 5 10 15

Ile Ile Asp Gly Leu Phe Met Glu Ile Leu Asn Ser Cys Ser Asp Cys 20 25 30

Asp Glu Ile Gln Phe Met Glu Asp Gly Ser Trp Cys Pro Met Lys Pro 35 40 45

Lys Lys Glu Ala Ser Glu Val Cys Pro Pro Pro Gly Tyr Gly Leu Asp 50 60

Gly Leu Gln Tyr Ser Pro Val Gln Glu Gly Asn Gln Ser Glu Asn Lys 70 75 80

Lys Arg Val Glu Val Ile Asp Leu Thr Ile Glu Ser Ser Ser Asp Glu 85 90 95

Glu Asp Leu

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<211> 167

<212> PRT <213> Homo sapiens

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Leu Pro Gly Ser Lys Gly Val Leu Thr Ser Gly His Gln Pro Ser Ser 20 25 30

Val Leu Arg Ser Pro Ala Met Gly Thr Leu Gly Gly Asp Phe Leu Ser 35 40 45

Ser Leu Pro Leu His Glu Tyr Pro Pro Ala Phe Pro Leu Gly Ala Asp 50 55 60

Ile Gln Gly Leu Asp Leu Phe Ser Phe Leu Gln Thr Glu Ser Gln His 65 70 75 80

Tyr Gly Pro Ser Val Ile Thr Ser Leu Asp Glu Gln Asp Ala Leu Gly 85 90 95

His Phe Phe Gln Tyr Arg Gly Thr Pro Ser His Phe Leu Gly Pro Leu 100 105 110

Ala Pro Thr Leu Gly Ser Ser His Cys Ser Ala Thr Pro Ala Pro Pro 115 120 125

Pro Gly Ala Val Ser Ser Ile Val Ala Pro Gly Gly Ala Leu Arg Glu 130 135 140

Gly His Gly Gly Pro Leu Pro Ser Gly Pro Ser Leu Thr Gly Cys Arg 145 150 155 160

Ser Asp Ile Ile Ser Leu Asp 165

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<211> 167

<212> PRT

<213> Rattus norvegicus

<400> 9

Pro Pro Thr Lys Lys His Cys Pro Val Thr Ser Ala Ala Ile Pro Ala 1 5 10 15

Leu Pro Gly Ser Lys Gly Ala Leu Thr Ser Gly His Gln Pro Ser Ser 20 25 30

Val Leu Arg Ser Pro Ala Met Gly Thr Leu Gly Ser Asp Phe Leu Ser 35 40 45

Ser Leu Pro Leu His Glu Tyr Pro Pro Ala Phe Pro Leu Gly Ala Asp 50 55 60

Ile Gln Gly Leu Asp Leu Phe Ser Phe Leu Gln Thr Glu Ser Gln His 70 75 80

Tyr Ser Pro Ser Val Ile Thr Ser Leu Asp Glu Gln Asp Thr Leu Gly 85 90 95

His Phe Phe Gln Phe Arg Gly Thr Pro Pro His Phe Leu Gly Pro Leu 100 105 110

Ala Pro Thr Leu Gly Ser Ser His Arg Ser Ala Thr Pro Ala Pro Ala 115 120 125

Pro Gly Arg Val Ser Ser Ile Val Ala Pro Gly Ser Ser Leu Arg Glu 130 140

Gly His Gly Gly Pro Leu Pro Ser Gly Pro Ser Leu Thr Gly Cys Arg 145 150 155 160

Ser Asp Val Ile Ser Leu Asp 165

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<211> 98

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<220>

<221> misc_feature

<222> (72)..(72)

<223> Xaa = glycine or glutamic acid

<220>

<221> misc_feature

<222> (74)..(74)

<223> Xaa = aspartic acid or asparagine

<220>

<221> misc_feature

<222> (75)..(75)

<223> Xaa = proline or glutamine

<220>

<221> misc_feature

<222> (81)..(81)

<223> Xaa = lysine or arginine

<400> 10

Trp Thr Cys Pro Val Cys Asp Lys Lys Ala Pro Tyr Glu Ser Leu Ile 1 10 15

Ile Asp Gly Leu Phe Met Glu Ile Leu Xaa Ser Cys Ser Asp Cys Asp 20 25 30

Glu Ile Gln Phe Met Glu Asp Gly Ser Trp Cys Pro Met Lys Pro Lys 35 40 45

Lys Glu Ala Ser Glu Val Cys Pro Pro Pro Gly Tyr Gly Leu Asp Gly Page 18

Leu Gln Tyr Ser Pro Val Gln Xaa Gly Xaa Xaa Ser Glu Asn Lys Lys 65 70 75 80

55

Xaa Val Glu Val Ile Asp Leu Thr Ile Glu Ser Ser Ser Asp Glu Glu 85 90 95

Asp Leu

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<223> Xaa = valine or alanine
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       Xaa = glycine or serine
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       (94)..(94)
       Xaa = alanine or threonine
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       misc_feature
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       xaa = tyrosine or phenylalanine
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<221> misc_feature
<222>
       (106)..(106)
<223> Xaa = serine or proline
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       Xaa = cysteine or alanine
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       Xaa = proline or alanine
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       (140)..(140)
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       (164)..(164)
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       Xaa = isoleucine or valine
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Pro Pro Thr Lys Lys His Cys Xaa Val Thr Ser Ala Ala Ile Pro Ala
Leu Pro Gly Ser Lys Gly Xaa Leu Thr Ser Gly His Gln Pro Ser Ser 20 25 30
                                                          30
Val Leu Arg Ser Pro Ala Met Gly Thr Leu Gly Xaa Asp Phe Leu Ser
35 40 45
Ser Leu Pro Leu His Glu Tyr Pro Pro Ala Phe Pro Leu Gly Ala Asp 50 55 60
Ile Gln Gly Leu Asp Leu Phe Ser Phe Leu Gln Thr Glu Ser Gln His 65 70 75 80
Tyr Xaa Pro Ser Val Ile Thr Ser Leu Asp Glu Gln Asp Xaa Leu Gly
His Phe Phe Gln Xaa Arg Gly Thr Pro Xaa His Phe Leu Gly Pro Leu
Ala Pro Thr Leu Gly Ser Ser His Xaa Ser Ala Thr Pro Ala Pro Xaa
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228844066.ST25.txt
Pro Gly Arg Val Ser Ser Ile Val Ala Pro Gly Xaa Xaa Leu Arg Glu
130 135 140
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Gly His Gly Gly Pro Leu Pro Ser Gly Pro Ser Leu Thr Gly Cys Arg 150 . 155 160

Ser Asp Ile Xaa Ser Leu Asp 165

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1 10 15

Thr Thr Ala Cys Cys Gly Ala Cys Gly 20 25

13 23

PRT

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1 10 15

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